

Hornet Wasp feeding on the meat of Indian Bullfrog

The Black Shield Wasp or Hornet Wasp Vespa bicolor is the largest of the known eusocial wasps. It is a common species of the hornet group of wasps of the family Vespidae. It is found in a wide range of environment and can also be found near human habitations. This species plays a vital role in the pollination of orchids (Gillott 2012). Although hornets feed on nectar, their workers also prey on insects especially honey bees and are also known to feed on meat for nutrients (Gillott 2012; Sung et al. 2014; Dorji et al. 2017). Here we report the Hornet Wasp V. *bicolor* feeding on the fresh meat of Indian Bullfrog Hoplobatrachus tigerinus.

A road kill of this frog being fed by a number of yellow-coloured wasps was observed at Mahananda Wildlife Sanctuary, Darjeeling



A road kill of Indian Bullfrog *Hoplobatrachus tigerinus* being fed by Hornet Wasp *Vespa bicolor* at Mahananda Wildlife Sanctuary, West Bengal. © M. Kamalakannan.

District, West Bengal, India (26.478° N, 88.223° E). The wasp was identified as a Hornet Wasp *Vespa bicolor* (Fabricius, 1787) through its bright yellow colour body with black stripes and a black triangular patch on the central part of the thorax. The smashed frog was identified as an Indian Bullfrog *Hoplobatrachus tigerinus* (Daudin, 1803) through its yellow spotted dorsum with a vertebral line. It was also noted that the Bullfrog kill was relatively fresh (determined through its fresh meat) while being fed by Hornet Wasps. Among vehicle-caused wildlife mortalities, amphibians especially Bullfrogs are the easier victims due to their slow mobility (Baskaran & Bhoominathan 2010). After



the road kill of any wildlife, scavengers like the birds of prey, carrion insects, etc. feed on the remains. Hymenopterans like ants and wasps can promptly detect prey/food from far away due to their higher temporal sense organs (Gillott 2012). The present observation corroborates the immediate presence of wasps in the feeding of meat of unattended road kills.

References

Baskaran, N. & D. Boominathan (2010). Road kill of animals by highway traffic in the tropical forests of Mudumalai Tiger Reserve, southern India. *Journal of Threatened Taxa* 2(3): 753–759. https://doi.org/10.11609/ JoTT.o2101.753-9

Dorji, P., T. Gyeltshen, W. Klein & T. Nidup (2017). New records of social wasps (Hymenoptera: Vespinae: Vespa and Provespa) from Bhutan. *Journal of Threatened Taxa* 9(4): 10102–10108. https://doi.org/10.11609/ jott.2423.9.410102-1010

Gillott, C. (2012). *Entomology*, pp. 302–318. Springer, Netherlands.

Sung, I.H., S.S. Lu, J.T. Chao, W.C. Yeh & W.J. Lee (2014). Establishment of *Vespa bicolor* in Taiwan (Hymenoptera: Vespidae). *Journal of Insect Science* 14: 231. https://doi.org/10.1093/jisesa/ieu093

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